

**I. PRODUCT IDENTIFICATION**

**Company:** Simpson Strong-Tie Company, Inc.  
**Address:** 4120 Dublin Blvd, Suite 400  
 Dublin, CA 94568  
**Emergency Contact Number:** 1-800-535-5053 USA  
 1-352-323-3500 International

**Trade Name:** ET - Epoxy Tie Adhesive  
**Product Description:** Epoxy based anchoring adhesive  
**Date Prepared or Revised:** August 2003

**II. HAZARDOUS INGREDIENTS**

RESIN			
Chemical Names	CAS Numbers	Exposure Limits in Air	
		ACGIH TLV	OSHA PEL
BisPhenol A/Epichlorohydrin (EPOXY RESIN)	25068-38-6	N/E	N/E
N-butyl glycidyl ether	2426-08-6	25 ppm	25 ppm
Silica, amorphous (fumed)	67762-90-7	2 mg/m <sup>3</sup> *	25 mg/m <sup>3</sup> **
Titanium dioxide	1317-80-2	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Calcium Carbonate	1317-65-3	10 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>

\*ACGIH TLV for amorphous silica, fume, respirable fraction.

The remaining ingredients are designated as "trade secret."

HARDENER			
Chemical Names	CAS Numbers	Exposure Limits in Air	
		ACGIH TLV	OSHA PEL
Phenol (Benzenol)	108-95-2	5 ppm (skin)	5 ppm (skin)
Benzene-1,3-Dimethanamine	1477-55-0	0.1mg/m <sup>3</sup> (C)(skin)	0.1mg/m <sup>3</sup> (C)(skin)
Silica, amorphous (fumed)	67762-90-7	2 mg/m <sup>3</sup> *	29 mg/m <sup>3</sup> **
Silica, crystalline quartz	14808-60-7	0.05mg/m <sup>3</sup> ***	3 mg/m <sup>3</sup> ***

\*\*OSHA PEL for amorphous silica, total fraction = 80mg/m<sup>3</sup> %SiO<sub>2</sub>

\*\*\*Respirable fraction. PEL based on 1% silica concentration in mixture.

**III. EMERGENCY OVERVIEW**

**RESIN**  
**HMIS RATING:** Health – 2; Flammability – 1; Reactivity – 0  
**Hazards** – Non corrosive. May cause allergic skin reaction.

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**IV. PHYSICAL PROPERTIES**

**RESIN**  
**Appearance:** White paste  
**Physical Form:** Thixotropic Gel  
**Boiling Point, °F:** N/E  
**Vapor Pressure:** Not Volatile  
**Vapor Density:** Not Volatile  
**Solubility In Water:** Insoluble  
**Viscosity:** Paste  
**Odor:** Sweet  
**Freezing Point:** N/E  
**Specific Gravity:** 1.26@ 72°F

**HARDENER**  
**Appearance:** Black paste  
**Physical Form:** Thixotropic Gel  
**Boiling Point, °F:** N/E  
**Vapor Pressure:** N/E  
**Vapor Density:** N/E  
**Solubility In Water:** Slight  
**Viscosity:** Paste  
**Odor:** Ammonia  
**Freezing Point:** N/E  
**Specific Gravity:** 1.33@ 72°F

**V. FIRE AND EXPLOSION**

**RESIN**  
**Flash Point:** 250°F  
**Method Used:** Tag Open Cup  
**Fire Extinguishing Media:** Water fog, carbon dioxide, dry chemical, aqueous foam.  
**Fire And Explosion Hazard:** Hazardous decomposition products may occur when materials polymerize at temperatures above 500°F.  
**Fire Fighting Equipment:** Wear full protective clothing and self-contained breathing apparatus.

**HARDENER**  
**Flash Point:** 225°F  
**Method Used:** Tag Open Cup  
**Fire Extinguishing Media:** Water fog, carbon dioxide, dry chemical, aqueous foam.  
**Fire And Explosion Hazard:** Irritating and toxic fumes may be produced at high temperature. In a fire, may produce carbon monoxide, toxic nitrogen oxide, ammonia, and carbon dioxide.  
**Fire Fighting Equipment:** Wear full protective clothing and self-contained breathing apparatus.

**VI. REACTIVITY DATA**

**RESIN**  
**Stability:** Stable under normal storage conditions.  
**Condition To Avoid:** Incompatible chemicals, heat and open flames.  
**Incompatibility:** Oxidizing agents, acids, organic bases, and amines.  
**Hazardous Decomposition Products:** Combustion may produce carbon monoxide, carbon dioxide, aldehydes, acids and other organic substances.  
**Hazardous Polymerization:** Will not occur.

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**Hazardous Polymerization:** Will not occur.

**VII. HEALTH HAZARD INFORMATION****ACUTE**

**RESIN**  
**Eye:** May cause eye irritation, swelling, tearing, redness or cornea damage.  
**Skin:** Moderate irritation. May cause skin sensitization, evidenced by rashes and hives.  
**Inhalation:** Moderate irritation to the nose and respiratory tract. May cause CNS depression, evidenced by giddiness, headache, dizziness, and nausea.  
**Ingestion:** May cause irritation to the gastrointestinal tract. May cause CNS depression or other systemic effects.  
**Systematic Effects:** Lungs, eyes, and skin.

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**VII. HEALTH HAZARD INFORMATION (CONTINUED)****CHRONIC****RESIN**

The Diglycidyl Ether of Bisphenol A has shown weak carcinogenicity in 2-year mice bioassays, produced chromosomal aberrations in cultured rat liver cells, and has shown activity by in-vitro microbial mutagenicity screening. Trace ingredients are potential carcinogens and/or reproductive toxins as indicated below.

**HARDENER**

Components of this product are not listed as carcinogens in concentration of 0.1% or greater. Repeated or prolonged exposure may cause allergic reaction and/or limited sensitization.

**SUSPECTED CANCER AGENT****RESIN**

Some chemicals in the resin are found in the following lists:  
Federal OSHA, NTP, IARC

**HARDENER**

Some chemicals in the hardener are found in the following list:  
IARC

These products contain the following chemicals known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the California "Safe Drinking Water and Toxic Enforcement Act of 1986" (as specified in 22 CCR Section 12000):

**RESIN**

	CAS #	% in blend (approx.)
Epichlorohydrin*	106-89-8	Trace
Phenylglycidyl ether*	122-60-1	Trace

**HARDENER**

	CAS #	% in blend (approx.)
Carbon Black	1333-86-4	0.05
Silica Quartz	14808-60-7	1

\* ACGIH "skin" designation, may be absorbed through skin

**VIII. TOXICOLOGICAL PROPERTIES****RESIN**

Acute Oral (LD<sub>50</sub>, Rat) – N/E  
Acute Dermal (LD<sub>50</sub>, Rabbit) – N/E  
Acute Inhalation (LC<sub>50</sub>, Rat) – N/E

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Acute Inhalation (LC<sub>50</sub>, Rat) - N/E

**IX. FIRST AID****RESIN AND HARDENER**

**Eye Contact:** Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. CONSULT A PHYSICIAN.

**Skin Contact:** Remove product and immediately wash affected area with soap and water. Do not apply greases or ointments. Remove contaminated clothing. Wash clothing with soap and water before reuse. CONSULT A PHYSICIAN

**Ingestion:** If conscious, immediately give two large glasses of water. Do not induce vomiting. Never administer anything by mouth to an unconscious victim. CONSULT A PHYSICIAN.

**Inhalation:** Remove to fresh air if symptoms listed in Section VII occur. CONSULT A PHYSICIAN.

**X. ENVIRONMENTAL AND DISPOSAL INFORMATION****RESIN AND HARDENER**

**Action To Take For Spills/Leaks:** Keep out of sewers, storm drains, surface waters, and soils. **Small spills:** Soak up with suitable non-reactive absorbent material, neutralize residue if necessary with potassium permanganate, scoop into containers for disposal.

**Large spills:** Dike and pump into suitable containers for disposal, clean-up residue with absorbent material.

**Disposal Information:** Place in leak-proof, compatible containers. Dispose of in accordance with federal, state, and local regulations.

**XI. STORAGE AND HANDLING****RESIN AND HARDENER**

**Storage:** Keep away from: acids, oxidizers, heat, or flames. Keep in cool, dry, well-ventilated area in closed containers. Protect containers from physical damage.

**Handling:** To prevent skin and eyes contact under the foreseeable conditions of use, wear appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Avoid breathing fumes. Handle in a well ventilated work area.

**XII. TRANSPORTATION****RESIN AND HARDENER**

**US DOT Classification:** This product is not considered a hazardous material. No marking or paper work is necessary.

**IATA Classification:** This product is not considered a hazardous material. No marking or paper work is necessary.

**XIII. OTHER INFORMATION**

CNS – Central Nervous System  
N/E – Not Established

This Material Safety Data Sheet (MSDS) is prepared by Simpson Strong-Tie Co. in compliance with the requirements of OSHA 29 CFR Part 1910.1200. The information it contains is offered in good faith as accurate as of the date of this MSDS. No guarantee, expressed or implied, is hereby made. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

